

REMARKS

Applicants appreciate the Examiner's thorough review of the present application, and respectfully request reconsideration in light of the foregoing amendments and the following remarks.

Claim 1 has been amended, and claims 1-9 remain pending after entry of this amendment.

The Examiner has rejected claims 1-9 under 35 U.S.C. 103(a) as being unpatentable over Spreadbury, U.S. Patent 4,350,934. This rejection is respectfully traversed for the reasons provided below.

As defined in the amended independent claim 1 of the present invention, the inductor has the first and second coils connected in series, and the first coil has a coil diameter larger than that of the second coil whereby input electric current flows through at least one coil selected from the first and second coils by utilizing a selecting switch, so as to generate sufficient corresponding inductance according to various input supply voltages.

However, the patent to Spreadbury fails to teach these features. Specifically, as shown in Fig. 1 of Spreadbury, the discharge device ballast component includes a multi-leg magnetic structure having a primary winding, an output winding, and a control winding (coil) carried on a first, a second, and a third legs thereof, respectively. Apparently, since these three windings are not

connected to each other, it is impossible to connect them in series. Besides, Spreadbury merely discloses that each of the primary and the output windings has a predetermined total number of turns to provide a predetermined output voltage, and teaches nothing about the coil diameters of the primary and the output windings.

In effect, the multi-leg magnetic structure disclosed by Spreadbury is like a transformer with a control winding which can control the effective ballasting inductive reactance. During operation, as shown in Fig.1 of Spreadbury, electric current flows from input terminals 18a and 18b to the primary winding 14 so that an induced current is generated in the output winding 20, and then the induced current flows to the device to be operated through output terminals 22a and 22b. Thus, the current (induced current) must flow through both the primary winding 14 and the output winding 20. On the contrary, in the inductor of the present invention, input electric current flows through at least one coil selected from the first and second coils by utilizing a selecting switch, so as to generate sufficient corresponding inductance according to various input supply voltages (as shown in Fig.5 and Fig.6 of the present invention).

Accordingly, the operational principle and the path through which the current flows of the discharge device ballast component

disclosed by Spreadbury are thoroughly different from those of the inductor of the present invention. In addition, although the Examiner alleged that the present invention merely replaces the control winding taught by Spreadbury with a switch, however, if the control winding is simply replaced by a switch, it is impossible to control the inductive reactance of the device taught by Spreadbury.

For any of the above reasons, the rejection to claim 1 should be withdrawn. Besides, as the Applicants have respectfully shown that Spreadbury fails to teach the independent claim 1, the rejection to claims 2-9, which are dependent on claim 1, should be withdrawn for at least the same reasons.

In view of the foregoing, the Applicants respectfully submit that all of the pending claims are in condition for allowance. Accordingly, a Notice of Allowance is respectfully requested.

Conclusion

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Joe McKinney Muncy (Reg. No. 32,334) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

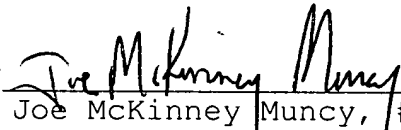
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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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